AMENDMENTS TO THE CLAIMS

Please amend claims 1-3, 6, 8, 10, 12, 21-23, 25, 27-28, and 30-31; cancel claims 4-5, 7, 9, 11, 13-20, 24, 26, 29, and 35 without prejudice; and add claim 36 as follows:

1. (currently amended) A ~~computer for synchronizing a~~ system for aspirating and/or dispensing of liquid samples that comprises a microejection device and a pump, which are connected with one another via tubing, wherein the pump is accomplished as a piston pump comprising a pump cylinder, a pump piston, and a pump drive, and wherein this system comprises a computer that is capable of being loaded with an activatable computer program product for synchronizing operation of the microejection device and the pump,

   wherein the system can carry out the following functions because of the computer program product loaded and activated ~~computer program product directs~~ into the computer ~~to control and synchronize the system~~:

   a) to actively define ~~a~~ sample volumes ~~and~~ until a maximum under-pressure is reached in the tubing, using only the microejection device, which is filled with sample liquid;

   b) dispense the ~~defined~~ sample volumes defined in (a) using only the microejection device, which is filled with sample liquid; and

   c) to track the piston ~~a part~~ of the pump that conveys liquid ~~around~~ about a tracking volume ~~valve,~~ that is dependent on the sample volume, which is defined in (a) and is actively dispensed only by the microejection device in (b); which tracking volume may deviate from the sample volume by an amount comprising a residual volume ~~to prevent excessive pressure differences in the microejection device, tubing, and pump~~.

2. (currently amended) The ~~computer~~ system according to Claim 1,

   wherein ~~it is integrated into the system as an electronic component.~~ the maximum under-pressure in the tubing as defined in (a) corresponds to an error volume of 100 nL, and wherein the residual volume as defined in (c) ~~borne by the tracking generates a drop in pressure in the tubing between the pump and the microejection device and~~ is smaller than 100 nL.

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3. (currently amended) The ~~computer~~ system according to Claim 1 or 2, wherein ~~it~~ the computer is integrated into the system as an electronic component that can also be externally operated and read out can be obtained therefrom.

4. (cancelled)

5. (cancelled)

6. (currently amended) The system according to Claim 1 or 2[[4]], wherein the microejection device comprises an endpiece that is a microejection pump.

7. (cancelled)

8. (currently amended) The system according to Claim 1 or 2~~6~~, wherein the microejection device is a piezoelectric micropump.

9. (cancelled)

10. (currently amended) The system according to Claim 1 or 2[[4]], wherein the microejection device further comprises an endpiece that is a disposable pipette tip, a pulse generator, and tubing connecting the endpiece and pulse generator.

11. (cancelled)

12. (currently amended) The system according to Claim 1 or 2[[4]], further comprising a reservoir, a three-way valve, or a reservoir and a three-way valve, with the three-way valve located between the pump and the reservoir, and the reservoir, the three-way valve and the pump being connected with one another by tubing.

Claims 13-20 (cancelled)

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21. (currently amended) A method for synchronizing a system for aspirating and/or dispensing liquid samples, wherein the system ~~that~~ comprises a microejection device and a pump connected with one another by tubing, wherein the pump is accomplished as a piston pump comprising a pump cylinder, a pump piston, and a pump drive, and wherein the system further comprises a computer that is capable of loading an activatable computer program product that synchronizes the microejection device and the pump, wherein the loaded and activated computer program product directs the computer to control and synchronize the system, the method comprising:

a) ~~to~~ actively defining ~~define a~~ sample volumes ~~and~~ until a maximum under-pressure is reached in the tubing, using only the microejection device, which is filled with sample liquid;

b) dispensing ~~dispense~~ the ~~defined~~ sample volumes defined in (a) using only the microejection device, which is filled with sample liquid; and

c) tracking ~~to track~~ the piston ~~a part~~ of the pump that conveys liquid ~~around~~ about a tracking volume ~~valve,~~ that is dependent on the sample volume, which is defined in (a) and is actively dispensed only by the microejection device in (b); which tracking volume may deviate from the sample volume by an amount comprising a residual volume. ~~to prevent excessive pressure differences in the microejection device, tubing, and pump.~~

22. (currently amended) The method according to Claim 21 or 36, wherein dispensing of the sample volume occurs in volume-defined partial steps.

23. (currently amended) The method according to Claim 21 or 36, wherein tracking of the piston ~~part~~ of the pump ~~that conveys the liquid~~ occurs continuously or in partial steps.

24. (cancelled)

25. (currently amended) The method according to Claim 21 or 36~~23~~,

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wherein the partial steps for tracking of the piston ~~part~~ of the pump ~~that conveys the liquid~~ are collected into series of steps, with a series of steps always comprising the same number of partial steps.

26. (cancelled)

27. (currently amended) The method according to claim 21 or 36~~, 22, 23, 24, 25, or 26~~, wherein the beginning or the end of the tracking of the piston ~~part~~ of the pump ~~that conveys the liquid~~ occurs with a time shift relative to the beginning or the end of dispensing of the sample volume.

28. (currently amended) The method according to claim 21 or 36~~22, 23, 24, 25, 26, or 27,~~ wherein, where a residual volume occurs due to the dispensing of the sample volume and the tracking of the piston ~~part~~ of the pump ~~that conveys the liquid~~ in partial steps, dispensing and tracking are adjusted to one another so that this residual volume is always borne by the tracking of the piston ~~part~~ of the pump ~~that conveys the liquid~~.

29. (cancelled)

30. (currently amended) The method according to Claim 21 or 36~~29~~, wherein a value corresponding to the residual volume is stored in the computer and is taken into account in dispensing samples following occurrence of the residual volume.

31. (currently amended) A computer program product for synchronizing a system for aspirating and/or dispensing liquid samples, wherein the system comprises a microejection device and a pump that are connected with one another by tubing, wherein the pump is accomplished as a piston pump comprising a pump cylinder, a pump piston and a pump drive, and wherein the system further comprises a computer wherein the computer is capable of being loaded with activatable computer program product for synchronizing operation of the microejection device and the pump, and wherein this

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computer program product, in its activated state, enables the computer to control and synchronize the system:

a) to actively define ~~a~~ sample volumes ~~and~~ until a maximum under-pressure is reached in the tubing, using only the microejection device, which is filled with sample liquid;

b) dispense the ~~defined~~ sample volumes defined in (a) using only the microejection device, which is filled with sample liquid; and

c) to track the piston of the pump ~~a part~~ that conveys the liquid about ~~around~~ a tracking volume ~~valve,~~ that is dependent on the sample volume, which is defined in (a) and is actively dispensed only by the microejection device in (b) which tracking volume may deviate from the sample volume by an amount comprising a residual volume ~~to prevent excessive pressure differences in the microejection device, tubing, and pump~~.

32. (original) The computer program product according to Claim 31, further comprising commands for controlling a three-way valve, connected upstream from the pump.

33. (original) The computer program product according to Claim 31 or 32, further comprising commands for controlling the pump for the aspiration of a liquid.

34. (original) The method of Claim 25, wherein the number of partial steps is 8 steps.

35. (cancelled)

36. (new) The method according to Claim 21, wherein the maximum under-pressure in the tubing as defined in (a) corresponds to an error volume of 100 nL, and wherein the residual volume as defined in (c) is smaller than 100 nL.

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